May 22, 2007

The Dow Chemical Company
Midland, Michigan 48674
USA

George W. Bruchmann
Chief, Hazardous Waste Materials Division
Michigan Department of Environmental Quality
P.O. Box 30241
Lansing, MI 48909-7741

Re: Letter dated May 3, 2007 regarding *Geomorph*™ Pilot Site Characterization Report, Upper Tittabawassee River and Floodplain Soils (Report); The Dow Chemical Company, Michigan Operations (Dow); MID 000 724 724

Dear Mr. Bruchmann:

This letter is a response to your letter to me dated May 3, 2007.

Dow is unclear about a number of topics raised in your letter. We understood that the use of the *Geomorph*™ technique for sampling was considered a pilot when approved on June 12, 2006 on the basis that it had to be compared with other techniques (e.g. geostatistical) for purposes of site characterization. With one outstanding condition, we understand that MDEQ has agreed that the *Geomorph*™ technique is appropriate for continued use in the characterization of the Tittabawassee River for purposes of the Remedial Investigation Work Plan (RIWP). Our understanding is that the only outstanding condition that seems to bear directly on the approval of the *Geomorph*™ technique is MDEQ's request for additional statistical information set forth in your letter and discussed below. The use of the rapid turn and 1613 B method, the geochemistry and the PCAP/IRA process do not seem to us to be part of the *Geomorph*™ technique, but rather are requirements related to the site characterization component of the RIWP that could be at issue even if Dow were not using ATS and their *Geomorph*™ technique for the design and implementation of the site characterization.

Thus, Dow understands that MDEQ has approved part of the RIWP for the Tittabawassee River and imposed certain conditions. The part that Dow understands is completed is the dioxin and furan characterization of the floodplain for the first 6 miles of the Tittabawassee River, subject to the conditions set forth in the letter (e.g. need for additional erosion scar sampling under the IRA/PCAP process, additional geochemistry work and characterization of chemicals other than dioxins and furans). Further, Dow understands that MDEQ has approved Dow to use the *Geomorph*™ technique for the design and implementation of the sampling of the floodplain for the reminder of the Tittabawassee River, subject to certain conditions. The in channel characterization for the first 6 miles and the rest of the River is still underway.

Based on the May 3, letter we may have to consider reviewing the procedures that the parties have been using to capture and communicate agreements and understandings reached during meetings. As discussed in detail below, there are a number of disconnects between what is represented as something that has been agreed to and what we understand to still be in the

process of being discussed. We will propose a tracking mechanism that we can share to bring clarity to commitments, deliverables and agreed goals.

The following sections of the letter address a number of issues raised in your letter.

Need for additional statistical information

Dow considers that the statistical tests reported in the February 1, 2007 UTR SCR constitute an ample evaluation of the GeoMorph site characterization process with random-on-grid and fixed-interval sampling approaches. This was the comparison MDEQ requested in order to grant approval of the UTR SAP.

Once the Middle Tittabawassee River (MTR) SAP is approved, and the field operations for 2007 are underway, Dow will seek to schedule a working session with MDEQ to have ATS present the statistical testing approach used to demonstrate adequacy of site characterization for HARP. This approach was worked out collaboratively with USEPA Region V/Fields Group in 2004. It was ultimately approved by both USEPA and WDNR.

When to supplement the "rapid-turn" method with 1613 B analyses

Dow disagrees with the proposed summary in the letter of the resolution of the issue of when to use the 1613 B analytical methods in addition to the rapid turn analysis for particular samples or types of samples. It is our understanding that this topic is still under discussion between Dow and MDEQ. Dow will address this topic in the Tittabawasse MTR SAP it will submit for MDEQ's approval. It is our understanding that the SAP once approved by MDEQ will establish the required protocol for the use of 1613 B in addition to the use of the rapid turn method.

Additional Geochemistry

Dow has agreed to supplement the geochemistry reports submitted in December, 2006, February, 2007 and March, 2007 with some additional work. Dow did not agree on a date by which such additional work would be provided because even at this time we do not know about the available laboratory and staff capability to complete this specialized work. Dow's understanding is that this was a topic of continuing discussions with MDEQ and that an agreed upon protocol and delivery date would be determined after the approval of the MTR SAP.

SWAC

Dow's understanding is that discussions regarding the approval of SWAC is ongoing and will be continued as part of the MTR SAP approval process.

In Channel Characterization

Dow agrees that it agreed to provide additional details regarding in channel sampling, but disagrees that it was agreed to provide a plan by May 15. On May 17, in channel sampling

was discussed with MDEQ and it was agreed that an in channel sampling program would be part of the MTR SAP.

Sample results of the extended list of chemical constituents

Dow has agreed to provide MDEQ with the sample results for the extended list of chemical constituents by the end of May.

Erosion scar sampling for the UTR

Erosion scar sampling is being proposed as an activity under the proposed PCAP/IRA for Reaches J, K, L, M, N and O.

Monthly versus quarterly data reporting

Our understanding is that MDEQ agrees that reporting of data on a monthly basis is more frequent than what is required by the License Condition II.L.4 and thus constitutes compliance with the License data reporting frequency.

Maps of monthly max TEQ and surface TEQs

Dow has agreed to provide as part of the monthly data reporting maps depicting the data by both the maximum TEQ concentration and surface concentrations.

Finalized cross sections for the remainder of the UTC by June 1

Dow will provide the finalized cross sections for the UTR by June 1.

Sincerely,

Ben Baker
Senior Environmental Project Leader
Sustainable Development
1790 Bldg.
Midland, MI 48674

cc: Mr. Jim Sygo, Deputy Director, MDEQ
Ms. De Montgomery, MDEQ
Mr. Steve Buda, MDEQ
Ms. Cheryl Howe, MDEQ
Mr. Allan Taylor, MDEQ
Mr. Gerald Phillips, U.S. EPA, Region 5
Mr. Greg Rudloff, U.S. EPA, Region 5
Mr. John Steketee, U.S. EPA, Region 5
Mr. Allen Debus, U.S. EPA, Region 5